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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,494	11/09/2000	Pascal A. Nsame	BUR9-2000-0071-US1	2612

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EXAMINER

HUYNH, KIM T

ART UNIT	PAPER NUMBER
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2189

DATE MAILED: 10/21/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/708,494

Applicant(s)

NSAME, PASCAL A.

Examiner

Kim T. Huynh

Art Unit

2189

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 4-6, 8-11, 14-16, 18-21, 24-26, 28-29 are rejected under 35

U.S.C. 102(e) as being anticipated by Dutton et al. (US Patent 6,047,350)

a. As per claims 1, 10, 11, 20, 21, Dutton discloses a system-on-a-chip integrated circuit structure comprising:

- a bridge (fig.1, 106) having a plurality of channels; (col.4, lines 15-67)
- a processor (fig.1, 102) local bus connected to said bridge, wherein said bridge includes a first channel (fig.1, 104) dedicated to said processor local bus (fig.1, 104); (col.4, lines 15-67)
- at least one logic device (fig.1, 107) connected to said processor local bus; (col.4, lines 15-67)
- a peripheral device bus (fig.1, 120, 130) connected to said peripheral device bus; (col.4, lines 15-67) at least one peripheral device (fig.1, 142) connected to said peripheral device bus;

- at least one memory (fig.1, 110) unit connected to said bridge, wherein said bridge includes a third channel (fig.1, 108) dedicated to said memory unit; (col.4, lines 15-67)
- at least one input/output unit connected to said bridge, wherein said bridge includes a fourth channel (fig.1, 120) dedicated to said input/output unit. (col.4, lines 66-77)

b. As per claims 4, 14, 24, Dutton discloses a multi-port static random access memory (SRAM) adapted to stored data when a previous data transfer is being performed. (col.4, lines 28-30)

c. As per claims 5, 15, 25, Dutton discloses a multiplexor adapted to selectively connect to other channels. (col.7, lines 3-9)

d. As per claims 6, 16, 26, Dutton discloses at least one memory unit comprises a first-type memory unit and a second-type memory unit different than said first-type memory unit, wherein said third channel is dedicated to said first-type memory unit and said bridge includes a fifth channel dedicated to said second-type memory unit. (col.7, lines 34-39), wherein, fig.2, 220a/220b for two types of memory)

e. As per claims 8, 18, 28, Dutton discloses at least one input/output unit comprises one or more of a peripheral interface, graphics interface, and serial bus interface, and wherein said bridge includes dedicated channels for each of said peripheral interface, graphics interface, and serial bus interface. (col.8, lines 1-34)

f. As per claims 9,19, 29, Dutton discloses at least one peripheral device includes one or more of a serial connection, network interface connection, and programmable input/output connection each connected to said peripheral device bus. (col.8, lines 1-34)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3, 7, 12-13, 17, 22-23, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutton et al. (US Patent 6,047,350)

a. As per claims 2, 12, 22, although Dutton not expressly disclose buffer memories adapted to store data. However, Dutton discloses memory 220 for storing data bandwidth, data source and data destination information. (col.6, lines 66-67), (col.7, lines 1-3)

Examiner takes Official Notice that buffer is well known in the art. It would have been obvious to one having ordinary skills in the art at the time the invention was made to include buffer with the same purpose of storing data.

b. As per claims 3, 13, 23, although Dutton not expressly disclose first-in-first-out buffer memories adapted to store data. However, Dutton discloses memory 220 for storing data bandwidth, data source and data destination information. (col.6, lines 66-67), (col.7, lines 1-3)

Examiner takes Official Notice that first-in-first-out buffer is well known in the art. It would have been obvious to one having ordinary skills in the art at the time the invention was made to include buffer with the same purpose of storing data.

c. As per claims 7, 17, 27, Dutton discloses the claimed invention except for first-type memory unit comprises static random access memory (SRAM) and said second-type memory unit comprises synchronous dynamic random access memory (SDRAM). It would have been an obvious matter of design choice to have different type of memories, since such a modification would have involved a mere changing type of memories with only the same purpose of storing data.

Response to Arguments

5. Applicant's arguments filed on 7/30/03 have been fully considered but are not persuasive

a. In response to applicant's argument that Dutton does not teach or suggest the bridge has multiple channels and each channels are uniquely dedicated to different devices. As Dutton notes on fig.1, see col.4 includes the description of how each of the devices connected onto bridge. Dutton does disclose bridge 106, has multiple busses (channels) such as bus 104 dedicated cpu, 106 for memory, 130 for i/o unit for and 120 for peripheral devices; and these busses (channels) are individual bussed not shared busses for cpu, memory, i/o unit and for peripheral devices. Therefore it is clearly that Dutton's reference read on the breadth of the claims language as recited in the independent claims.

Conclusion

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (703)305-5384 or via e-mail addressed to [kim.huynh3@uspto.gov]. The examiner can normally be reached on M-F 8:30AM- 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703) 305-4815 or via e-mail addressed to [mark.rinehart@uspto.gov]. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9306 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-5631.

Kim Huynh

Oct. 16, 2003


SUMATI LEFKOWITZ
PRIMARY EXAMINER